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AN ARCHAEOLOGICAL ASSESSMENT OF THE PROPOSED FUNDY TRAIL (ST. MARTINS TO ALMA)

Prepared for:

DEPARTMENT OF TRANSPORTATION
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November 1, 1990

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Mr. Brian McEwing
Assistant Director
Planning Branch
Department of Transportation
P.O. Box 6000
Fredericton, NB
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Dear Mr. McEwing:

Re: Assessment of the Proposed Fundy Trail With Respect to Archaeological Resources, Big Salmon River Crossing

We are pleased to submit the final report entitled " An Archaeological Assessment of The Proposed Fundy Trail (St. Martins to Alma)". The report outlines the procedure, and results of an archaeological survey of the study area at the mouth of the Big Salmon River.

As stipulated in Archaeological Field Research Licence 90NB8, a copy of this report, as well as a copy of field notes, will be delivered to Archaeology Services of the Department of Tourism, Recreation and Heritage.

We will be pleased to discuss our report and the results with you at your convenience.

Yours very truly,

Robert Hutt

Robert Hutt, P.Eng.
Vice-President

SF/pdw

Enclosure

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MANAGEMENT SUMMARY

As part of the EIA process for the proposed Fundy Trail parkway, the Department of Transportation acting as a mediator for the Fundy Trail Development Authority Inc., acquired the services of Washburn & Gillis Associates Ltd. to conduct a field examination for archaeological resources at the mouth of the Big Salmon River.

The following Pre-Screening Evaluation Report documents the results of the field examination, and is submitted to be incorporated into the Authority's EIA Registration package and as partial fulfilment of the archaeological license as required by the Department of Tourism Recreation and Heritage.

Fieldwork identified remains of a settlement built by a lumber company to harvest the area forest. The Salmon River settlement existed between the mid 1800's and the early part of the twentieth century. Salmon River's population included the families of the work force, and is thought to have been in excess of 100 individuals.

For recording purposes the settlement has been arbitrarily divided into two components. Salmon River 1 deals with the community, and Salmon River 2 addresses the marine transport related features.

As it is recognized that there are heritage resources in the Study Area, it is recommended that these resources be utilized to enhance the Fundy Trail concept or

experience through an appropriate level of interpretation. It is also recommended that the structural features at the mouth of the Big Salmon River be photo-documented in detail, to provide a lasting record.

Although this report thoroughly documents the heritage resources in the area of the proposed crossing of the Big Salmon River, it should be recognized that other known resources exist outside the study area. The cemetery associated with the Salmon River Settlement is thought to be located immediately upstream of Cranberry Brook. A second cemetery may exist in the same river valley, however, local historians know of no physical or documentary evidence. Other cemeteries are known to exist along the general corridor of the proposed Fundy Trail alignment.

Other communities similar to Salmon River were once located along the coast. These may be along the alignment for the Fundy Trail.

The potential of prehistoric Native groups utilizing the coast can not be dismissed. Paleo period finds (ca. 10,000 years old) discovered at Quaco and New Horton Creek point to utilization of the area by man just after the retreat of the glaciers some 10,000 years ago.

1.0 INTRODUCTION

The concept of the proposed Fundy Trail (St. Martins to Alma) is currently under study by the University of New Brunswick Transportation Group. Contact between the Transportation Group and Archaeological Services of the Department of Tourism Recreation and Heritage concerning the proposed Fundy Trail lead to the decision to carry out an archaeological assessment of the proposed parkway alignment. The primary purpose of this assessment was to inventory the archaeological resources occurring within the area of the mouth of the Big Salmon River. Washburn and Gillis Associates Ltd. was engaged by the New Brunswick Department of Transportation to carry out a heritage resource assessment of the Study Area.

The concept of the Fundy Trail parkway has been discussed for decades. The basic principle of the Trail is to open a scenic, unspoiled, and in the case of this section, unaccessible section of the Fundy coast to tourist traffic. The current proposal calls for a two-lane chip-sealed parkway. The parkway would be restricted to cars and other light traffic. The Trail would be closed in the winter season.

2.0 ARCHAEOLOGICAL AND HISTORICAL SETTING

Archaeologically, much of the interest of the area centres around the possibility of discovering early prehistoric period sites. The earliest human occupation of the eastern Canadian and United States seaboard occurred approximately 10,500 years ago following the retreat of the Pleistocene ice sheet. Archaeological sites dating to this period, termed the paleo period, are extremely rare, and subsequently are of great significance. This section of the Fundy coast has not been systematically investigated archaeologically. What is known about the paleo period has been inferred from adjacent regions. There are only five locations in the province where material affiliated to the paleo period has been discovered. Generally these finds are without archaeological context, little other than isolated artifacts exist, with no opportunity to study the site.

The New Brunswick portion of the Fundy coast holds considerable archaeological potential, as two of the paleo affiliated sites are on its shores. The proximity of these sites to the study area increase the potential archaeological value of the coastal area. This combined with the relatively undeveloped nature of the area may provide archaeologists a rare opportunity to study a paleo site. This increases the urgency of investigating the area prior to development. A paleo period projectile point was recovered at Quaco Head 10 km to the west, and other period finds have been made at New Horton Creek some 40 km to the east.

The chance of area utilization by, and therefore finding in-ground evidence of, prehistoric Native groups is considerable. Potential reasons for utilization by Native groups include salmon harvesting (particularity at the head of tide), vantage points for sea mammal harvesting, and campsites associated with these activities.

Through the mid to late 1800's, the St. Martins area was one of the world's most active shipbuilding centres. Shipbuilding and the lumber industry associated with it, account to a large extent for the development and character of the area.

The Study Area is located on the north shore of the Bay of Fundy in Saint John County, approximately 8 km east of the Village of St. Martins. Preliminary documentary research, while not revealing prehistoric activity in the immediate Study Area, has shown that the mouth of the Big Salmon River has seen considerable historic activity. This historical activity occurs on and around the area of the proposed parkway approaches on the west bank of the Big Salmon River.

In the mid to late 1800's a lumbering concern (possibly the Pejebscot Paper Company) harvested the timber resources in the river valley and beyond. To facilitate the harvest which was carried out over some 75 years, the company constructed boarding houses and other structures around the mouth of the Grand Salmon River as the river was formerly called. The settlement eventually came to be known as Salmon River.

The settlement is estimated to have had a population of well over a hundred, including the families of the workers. Photographs of the settlement taken just after the turn of the century indicate that some 25 substantial houses and commercial/industrial structures, as well as a number of outbuildings stood on the west bank of the river (Plate 1 and 2). The settlement had its own school, as well as the Salmon River Bank. Religious services were held in the community, but it is not known if there was a church building.

There was a cemetery associated with the settlement but its location was not identified during the documentary research or field reconnaissance. As of ten years ago the cemetery consisted of one or two stones, and some fencing. The cemetery is understood to be on the east side of the river, around the head of the tide on a terrace. This would place it outside the study boundaries. The location should, however, be confirmed prior to construction and appropriate measures taken, if necessary.

The commercial make-up of the settlement is thought to have centred around a sawmill on the river, and activities associated with the mill, such as log driving. Shipbuilding was an other industry of the community. It has been suggested that shipbuilding actually pre-dated the settlement.

The road to Salmon River, virtually abandoned at present, was at one time more or less settled along its length.

Although Salmon River did not exist as a settlement in the 1960's, there were still boarding houses and possibly other structures (Plate 3). At this time pulp wood was loaded on to scows at the mouth of the river, and then transported to larger vessels in the bay. The loading of pulp was the last vestige of an earlier era. Locals recall seeing schooners loaded with lumber at Salmon River for transport to the United States (Plate 4).

3.0 STUDY AREA

The lower section of the Big Salmon River has a general southeast flow. For the purpose of describing the location of features in the text, the axis has been assumed to have a north-south position. What is referred to as the "west" bank, is that bank closest to St. Martins, while the "east" bank is on the Fundy National Park side of the river. In the text the Fundy coast is described as running east-west where in actual fact is follows a northeast-southwest alignment.

The Study Area was defined as a result of the location of two proposed crossing sites of the Fundy Trail at the Big Salmon River (Plates 5 and 6). Specific areas of high potential were identified by The Department of Tourism, Recreation and Heritage. These areas were given a Priority 1 rating. The boundaries were extended during the study to include several adjacent areas. These areas were rated Priority 2 (Figure 1). To comprehend the heritage resources of the area, and put these resources in perspective, approximately one square kilometre was inspected. Specifically under investigation were both banks of the Big Salmon River from the mouth upriver to the foot bridge, and areas of adjacent valley walls.

The area is very rugged with elevations of Salmon River valley ranging from sea level to over 125 m. The river valley is steeply cut with prominent headlands at the mouth on both sides of the river. There are several terraces at various elevations on the

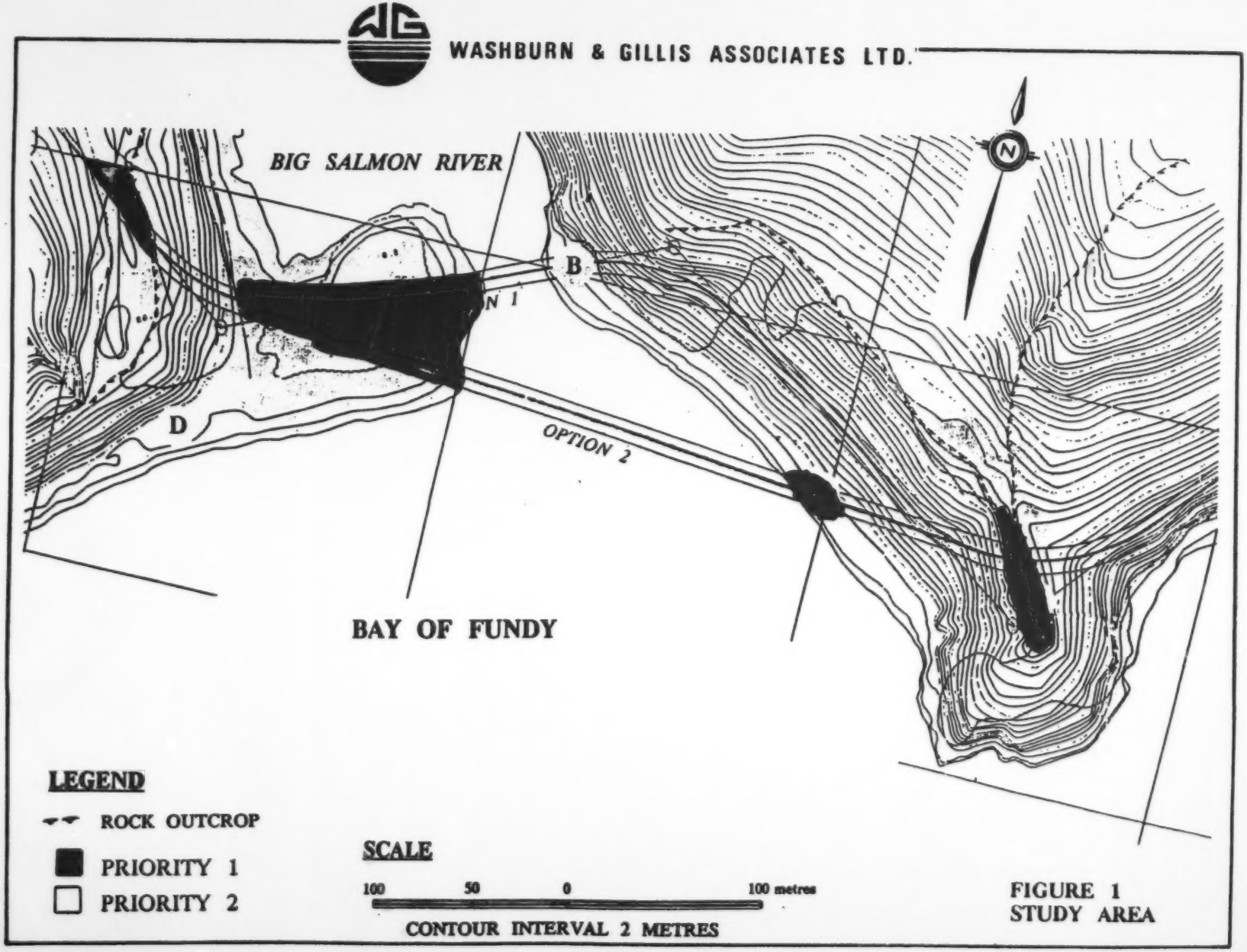

FIGURE 1
STUDY AREA

western bank. Although the extreme elevations allow good observation points of the coast and bay, it is this same feature that have had a limiting effect in the settlement of the area.

The fast flowing cobble and gravel river with tidal influences, makes a good salmon habitat as the name suggests. Salmon anglers presently, and probably prehistorically, utilize this resource.

Exceptional tides allowed for shipbuilding and other marine related activities.

The coastal climate supports the growth of healthy forests. Lumber, and later pulp have been harvested from the area since the mid 1800's.

4.0 METHODOLOGY

Prior to the field visit, preliminary historical research familiarized the study team with the area's general historic profile. Arrangements were made with the St. Martins Museum and Library to review pertinent documentation.

Upon arrival at the site, a thorough and detailed reconnaissance of the study area was undertaken. The field assessment undertaken by Washburn and Gillis Associates Ltd. was carried out by a Heritage Resource Specialist and Senior Biological Technician. This segment of the study consisted of three days in the field and was carried out between Monday, July 23 and Wednesday, July 25, 1990. Field work was authorized under Archaeological Research Permit 90NB8.

At this time significant topographical and archaeological features as well as areas of high archaeological potential were identified.

Review of documentation at the St. Martins Museum and Library allowed the study team, now familiar with on ground features, to associate features with the historical record.

The study team returned to the area to record features, and carry out surface examination and shovel testing.

Surface examination for prehistoric sites included inspections of river and ocean banks, other erosion scars, road cuts, as well as interpretation of topography in relation to prehistoric sea levels and environments. Two areas were shovel tested.

The main area of prehistoric interest was at the top of the eastern headland where maps indicate a long narrow and flat terrace at about 25 m above sea level. This area was rated as Priority 1. Field examination of this terrace and surrounding area confirmed its potential as a vantage point (Plate 7). However, erosion is severe and the point of the headland is presently approximately 1 to 1.5 m in width. The eastern side is covered in heavy growth, but the west side is exposed to the elements. The west side has an erosional face, which was inspected. This terrace runs northward and expands to a wider terrace of approximately 30 m E-W X 40 m N-S at elevations of 25-35 m above sea level. This area is predominately covered in thick fern growth. Several 20 cm X 20 cm shovel test holes (approximately 6) were dug into this terrace with negative results. The soil profiles were all similar. A black, very organic wet humus extended from below a very loose sod to a gravel till at a depth of 30-40 cm.

From this terrace to about 100 m above sea level the vegetation consisted of very densely packed young evergreens, and mature deciduous trees. This combined with the rapid rise in elevation made shovel testing inappropriate. Tree falls were numerable and examined for lithic and ceramics etc. At the height of land the terrain levelled out

considerably and approximately a dozen shovel test holes were judgementally placed around the erosional face at the 100-110 m above sea level. In this area soils were thin (5-20 cms) and often were on bedrock plates.

This area and upward has seen at least two periods of forest harvesting separated by a considerable length of time as indicated by tree stumps.

The areas where proposed Options 1 & 2 meet the east bank were surface inspected (Figure 1). The area of Option 1 (Priority 2) has the remains of a small section of cribwork. This area is subjected to strong tidal and river influences and as a result a large sand/gravel bank has formed. No prehistoric artifacts were observed. Because of the tides, the shifting nature of the soil matrix, and consequently the lack of archaeological context, this area is of little archaeological significance.

The area where Option 2 (Priority 1) crosses the lower beach area was also surface examined. For archaeological purposes topographical maps are misleading in this instance in that they do not show the amount of slump from the erosional face, nor the size of cobbles and boulders on the beach. This area has little or no potential for prehistoric sites. Although a large (delta/mudflat) area is exposed at low tide (Plate 7), the beach is strewn with large boulders making passage hazardous. No prehistoric material was observed.

Another area (D) was on the west bank of the river, along the erosional face of the Bay of Fundy (Figure 1). Although not as prominent a headland as that on the east bank, the elevation of the area gives a good vantage point. The beach in front of this area is more accessible, as are the various terraces.

Starting at the lowest terrace and working to the highest elevation on that face, 20 X 20 cm shovel test holes were dug on a judgemental basis. Soil profiles were typically a well packed sod or bushes, with a thin organic soil of approximately 10 cm over hard packed gravel and cobbles. The erosional face was examined where safety allowed. There was no prehistoric material culture.

5.0 RESULTS

Due to the size of the Study Area and the complexity of the historic periods, the site has been divided into two components for descriptive purposes (Figure 2): Salmon River 1, the community, and Salmon River 2, the marine transport component.

5.1 Salmon River 1

On the west side of the river are at least six terraces or plateaus. Several of these are outside the Study Area, and are not shown on the map provided.

The site seems to consist of several level areas on the steep west bank connected by roads or tracks. From photographs available at the St. Martins Museum and Library and the Provincial Archives, it is suggested that each of these level areas were used for the placement of structures. It is further reasoned that remains on lower levels closest to the river are (a) the oldest, and (b) commercial/industrial in nature. Generally, residential complexes would be further back from the river, again the oldest of these being closest to the river.

Noticeable at Salmon River 1 is the lack of in-ground structural remains. Over the intervening years there may have been surface alteration at Salmon River 1. On site inspection revealed only two foundations. Considering the number, and size of structures this seems to be a low figure. Alternatively, some structures may have rested on sills.

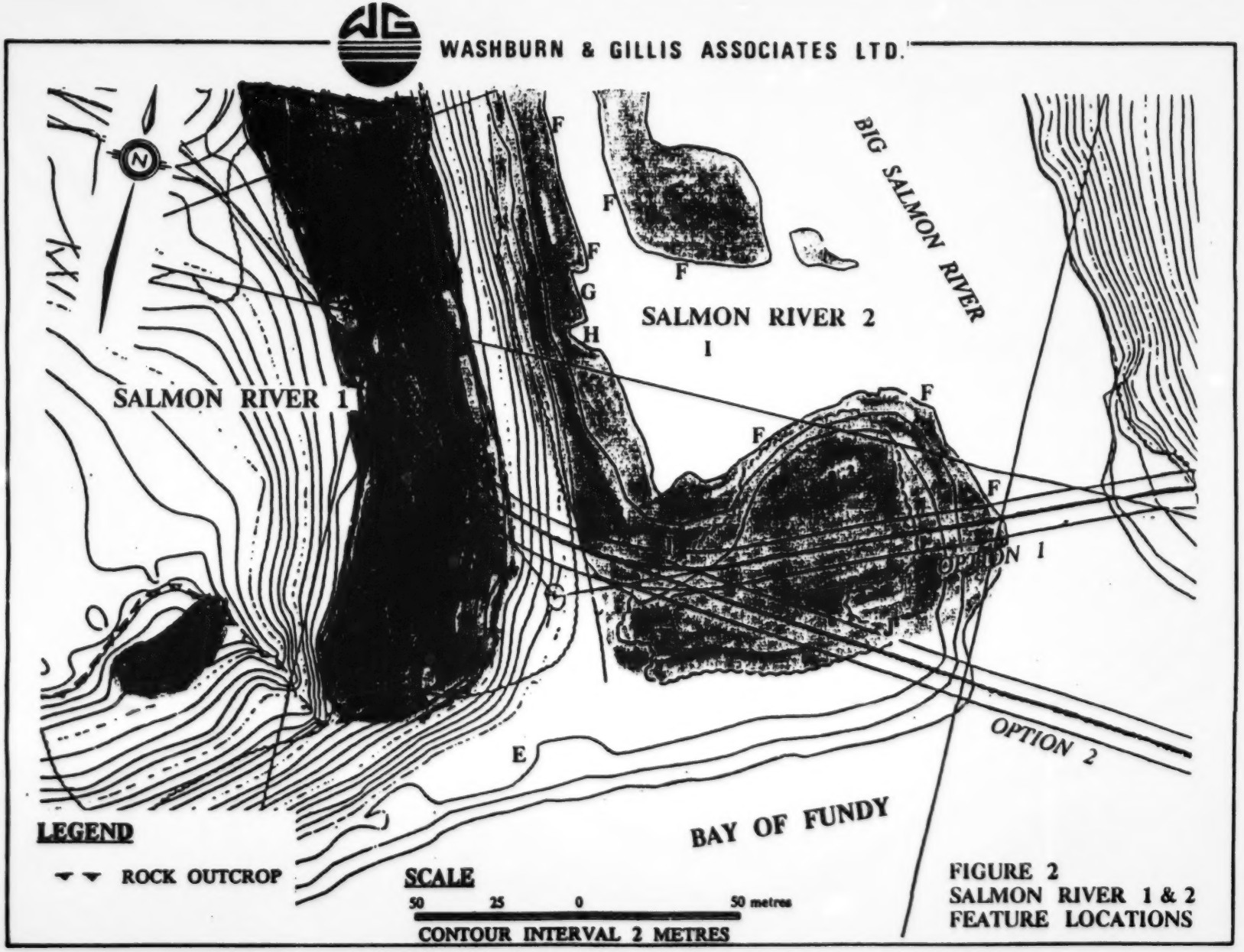

FIGURE 2
SALMON RIVER 1 & 2
FEATURE LOCATIONS

The most obvious indicators of cultural disturbance are vegetation anomalies. Apple trees and other domestic tree species, domestic flowers gone wild, vines and raspberry patches are predominant site indicators. Inspection of these vegetation patterns often revealed small trash heaps containing ceramics, liquor bottles, metal, etc.

Material culture was not collected. The antiquity and cultural affiliation of the site was known, and surface collecting would serve little use at this stage of investigation. Most of the material culture was observed in and around trash heaps. A field examination of the trash heaps dated the refuse to a period compatible with the historical record. Although most of the artifacts date to the later end of the time frame, generally dates of the late 1800's to mid 1900's could be assigned. Very little on-site evidence remains at Salmon River 1. Other than the vegetation anomalies and trash heaps there are the following features:

5.1.1 Foundations A & B

Located on the second level terrace or the main terrace are two foundations (Figure 2). This level is presently used for seasonal trailer parking, and is easily accessed as the Salmon River Road passes immediately upgrade (west).

One foundation (A) is found just south of where the road passes the terrace, towards the erosional face. Presently grass covers the foundation which measures roughly 3 m X 3 m, and is 1 m in depth. The second foundation (B) is further south on this same

terrace. It lies immediately east of the access track to southern most terrace or level 3. This foundation appears to be on or very close to the proposed approach, in a Priority 1 area.

5.1.2 Line of Stone

Continuing south on the access track there is a slight rise in elevation to the next terrace or level 3. This track cuts across a single line of uncut stone that may have been a part of a sill or temporary foundation (C). There was no mortar associated with this feature.

This terrace level may have been displaced by heavy equipment (Plate 8). It appears that the soil matrix has been moved to the brink of the erosional face. A raised wedge shaped lip in excess of a meter high and five to ten meters wide ends at the outward edge, on the erosional face.

5.1.3 Spring/Shallow Well

The highest terrace level, the sixth (D), is to the south of the Salmon River Road where it descends steeply (Figure 2). The access track to this terrace is easily missed as it is surrounded by alders and other bushes. Thick and varied vegetation on this terrace suggest that further investigation may reveal in-ground structural remains. This level would overlook levels 2 and 3, and the river, if it were not for the thick growth. At the

southern extent of the terrace, next to the rising valley wall is a small wet, organically filled depression. This depression approximately 1.5 m in circumference, appears to be scooped out of the side of the hill.

The erosional face caused by tides of the Bay of Fundy, at the southern extent of Salmon River 1 (E) is extremely unstable and of considerable height (Figure 2). The face consists of unconsolidated sand, gravel and boulders. On this face, and visible from the beach, is evidence of burning (ash layer and blackened rocks) and an artifact scatter (glass, metal). Immediately east of the feature is an access path to level 3 terrace, and apple trees. The present location of this feature may be the result of surface alteration such as the earth moving activities mentioned previously. The very steep slope does not make this location ideal for the placement of a structure.

5.2 Salmon River 2

Salmon River 1 existed to service the Salmon River 2 component of the site. In all probability the appearance and function of the Salmon River 2 component changed considerably over the life of the community. This section summarizes the present understanding of information pertaining to the component.

Presently there appears to be two areas of activity to Salmon River 2. Upstream are the remains of a buttress dam that related to the lumber industry. At the mouth of the river are substantial docking facilities (F), the remains of what is taken to be a steam powered sawmill (G), and one or two possible slipways (H) (Figure 2).

Less obvious features are the remains of a raised catwalk type of structure running from the dam to the mill area (Plate 16,26). Whether this was for foot traffic or to move logs and/or water to the mill could not be interpreted from the in-ground evidence, although photographs suggest the former.

The dam was a rock filled and log buttress dam. The dam deck on the upstream slope still remains and is made from heavy planking. Although the spillway face is gone, there is cribwork on the opposite shore to support the other end of the spillway.

Scattered around the estuary area, on the west side of the river were several cribworks that might have helped to regulate the direction of water flow. These may have acted as a partial chute. The substantial size of some of these suggest that they would have been used to tie up vessels.

Just below the dam were the remains of a wood structure that appears to have been an early weir type fish ladder (Plates 9 and 10). It was a series of gentle steps leading to the top of the dam. It is known that salmon conservation measures were practised on the river at a relatively early date.

Also immediately below the dam was a substantial wood structure (not shown on map). The structure consisting of two large parallel beams approximately 3 m apart in

the intertidal zone just above high water level. They were each supported by four uprights. The function of the structure is undetermined, but it may have been part of the catwalk feature, or support for a heavy structure (Plates 9 and 10).

The western side of the estuary was utilized as a small but well protected harbour (I, Figure 2). Cribworking provided the depth necessary to float loaded three masted schooners at high tide. Although the entire harbour is dry at low tide, there is approximately 3 m of water in some sections of the harbour at high tide (Plates 11 and 12). On site remains suggest that this side of the river was at one time completely lined with wharves. While these wharves would have given the necessary depth, they also helped to control erosion of the sand beaches. The wharf north of the sawmill was particularly extensive, and was probably used for short term storage of timber or lumber prior to transport.

The sawmill (G, Figure 2) appears to be a recent structure constructed out of corrugated sheet metal on a wood frame. There may have been a mill on this site prior to the present one. A boiler and a concrete motor mount remains inside the mill. As the size of the structure is relatively small (approximately 5 m X 10 m) it may only have housed the engine and saw, or other important equipment (Plate 13).

Just to the south of the sawmill was a small graded access or slipway to the water (H, Figure 2). Whether this was used for shipbuilding was not determined during the field examination (Plate 14).

A significant portion of the beach along the front of the site, now overgrown by alders bushes and grass, was formerly a sawdust/woodchip pile (J, Figure 2). The deposit, wedge shaped in profile, is thickest close to the mill (45 cm) and thins out towards the beach-front(10 cm).

Another feature that may be part of either component is an area of Brickwork (Not on Map). The brickwork observed was approximately two to three meters in length. It is of unknown width as it was buried beneath a dirt pile placed to restrict vehicular traffic. It is located just downstream of the dam, along the footpath leading from the lowest terrace (parking area) to the Fundy beach area. The bricks, which lay on a slight slope, and are being overgrown by grass and bushes, may be the result of a wall collapse.

5.3 East Side of the River

Upon completion of the assessment of the west side of the river, attention was turned to the eastern side. Areas of particular interest included the areas where the proposed routes intersect with the east shore of the river.

In general this side of the river seems to have been utilized to a lesser degree than the west side. This is no doubt a result of the steep topography. Slightly north of the study area two interesting features were observed, and are mentioned simply to help provide an overall picture of the community.

During the lumbering operations logs were cut and brought to several points at the edge of the valley along the east bank. Logs were slid down the steep slope of the river valley into the water below. Scars of this operation remain, and are seen as large "u" shaped troughs running from the top of the valley to the river (Plate 15). At least two of these occur on the east side just north of the study area, and a third was observed leading from the height of land west of Salmon River 1 to the Bay of Fundy. At this last location is a relatively recent and small sawdust pile. Locals claim that a mill burnt in the general area within the last few decades. It follows that the pile and trough are associated with that mill.

Located upstream of the Study Area at the bend in the river is a cairn. The cairn is in memory of a man dedicated to salmon conservation and the improvement of salmon habitat of the river. He lost his life on the river in the 1950's.

The river from above the dam, down stream to the foot bridge has undergone substantial stream alteration in the recent past. It would appear that the river valley bottom has been bulldozed to improve salmon habitat and/or fishing conditions. This re-deposition would have destroyed any archaeological context.

6.0 EVALUATION AND DISCUSSION

Initial interpretation of geological features in the area to the east indicates that there is potential of paleo period landforms. What appears to be the remains of a raised ocean floor can be seen in the valley just west of Tuft's Point. This feature occurs on the 25 - 50 m contour (Plate 16).

Although the site area has several attributes associated with prehistoric sites, prehistoric components were not observed. The lack of such components at Salmon River may be the result of several factors.

Active erosion along this section of coast would have removed former shoreline evidence. In other instances prehistoric and historic groups would have used the same site areas. The utilization of these areas by later groups for lumbering, construction of docking facilities and use as a settlement would obliterate much of the earlier evidence (Plate 17). Although outside the Study Area, it is noted that substantial stream alteration around the head of tide and down stream has destroyed archaeological context.

Generally conditions west of the Big Salmon River are not as favourable for prehistoric sites. This situation is compounded by tides, and shifting sands. The topography excludes many areas as well.

Historically the area was very active in the later part of the 19th and the early 20th centuries. Some archaeological and architectural features from this period remain. These remaining features are associated with lumbering and marine transport of logs, lumber and later pulp. There are also features relating to the community of Salmon River.

The historical heritage resources of the area are visually impressive, if not significant. The Salmon River 1 and 2 components may be able to add to research on maritime themes, shipbuilding, technology, sociological studies.

On a different level the aesthetic value of these resources could be used to enhance tourism in the area. The heritage resources at Big Salmon River if given a minimum of interpretation could be integrated into the proposed Fundy Trail experience.

7.0 RECOMMENDATIONS

1. No cultural evidence of prehistoric significance was identified during the preliminary field investigation. Therefore, no additional investigations related to this period are recommended.

2. The Salmon River area was found to be the former site of a logging/shipping settlement associated with the economic development of the area. This settlement is not considered to be of historical significance. It is recommended however, that a decision be made as to whether the tourism potential of the heritage resources at Big Salmon River is compatible with the overall objectives of the proposed Fundy Trail. The option of retaining the historical potential by integration into the Trail concept should be considered at this stage of planning.

3. It is recommended that the heritage resources in the Study Area be further photo-documented. This documentation would serve as;

    a) a record and data source for future research

    b) photographic base for incorporation into an interpretive program, pending the results of item 2 considerations

4. A cemetery has been identified as being located in the general study area. However, there is no indication that the proposed alignments will impact on the cemetery. The location should be confirmed and appropriate action should be taken with regard to relocation, if necessary.

8.0 REFERENCES

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APPENDIX A
PLATES

PLATE 1
Salmon River settlement from east side of river
ca. 1900

PLATE 2
Population included workers and families
ca. 1890

PLATE 3
Row of boarding houses Great Salmon River
ca. 1922

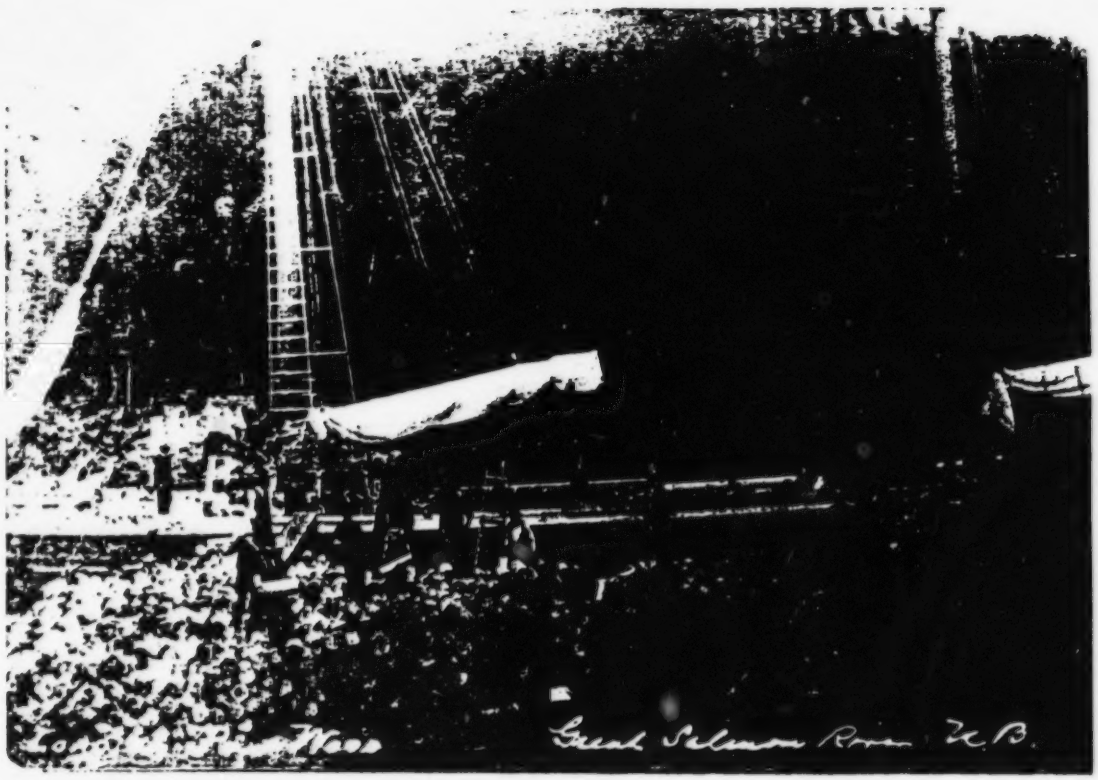

PLATE 4
Loading "Pulp Wood" Great Salmon River, NB
ca. 1910

PLATE 5
General path of proposed Option 1, looking east
July, 1990

PLATE 6
General path of proposed Option 2, looking east
July, 1990

PLATE 7
Looking west from the Vantage point, on the head of land, east bank Salmon River in foreground at lowtide
July, 1990

PLATE 8
Looking northerly along Terrace with raised lip
July, 1990

PLATE 9
From west bank looking at dam, fishway, and cribworks - hightide
July, 1990

PLATE 10
From west bank looking at dam, fishway, and cribworks - lowtide
Juiy, 1990

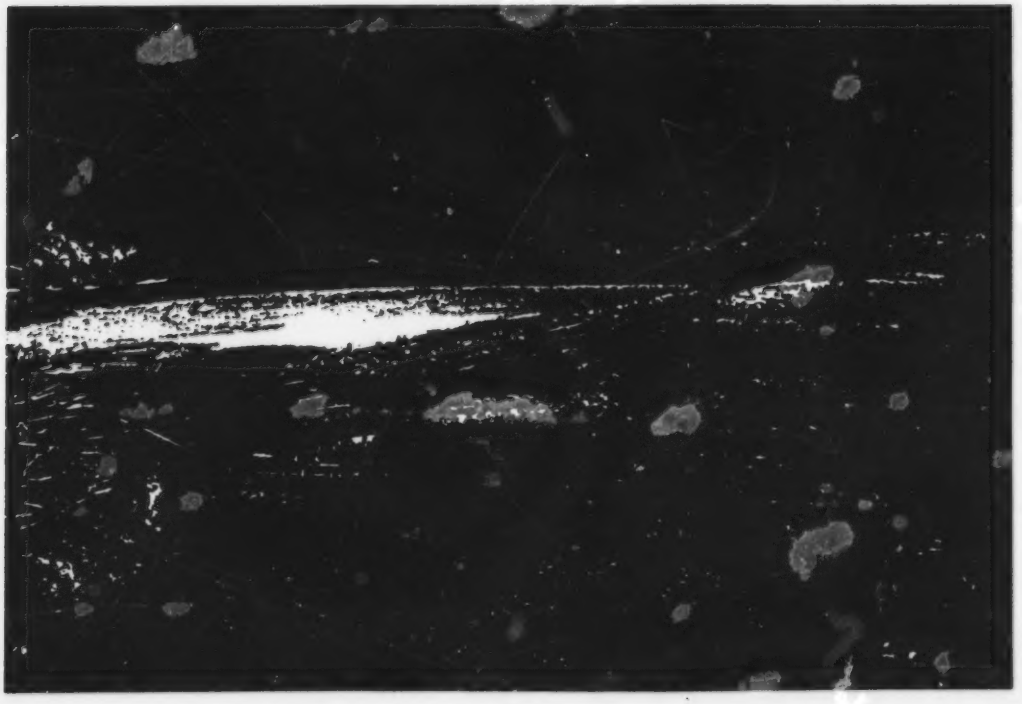

PLATE 11
Looking north at docking facilities, lowtide
July, 1990

PLATE 12
Wharf scene at Big Salmon River, lowtide
ca. 1890

PLATE 13
Looking west at Sawmill, hightide
July, 1990

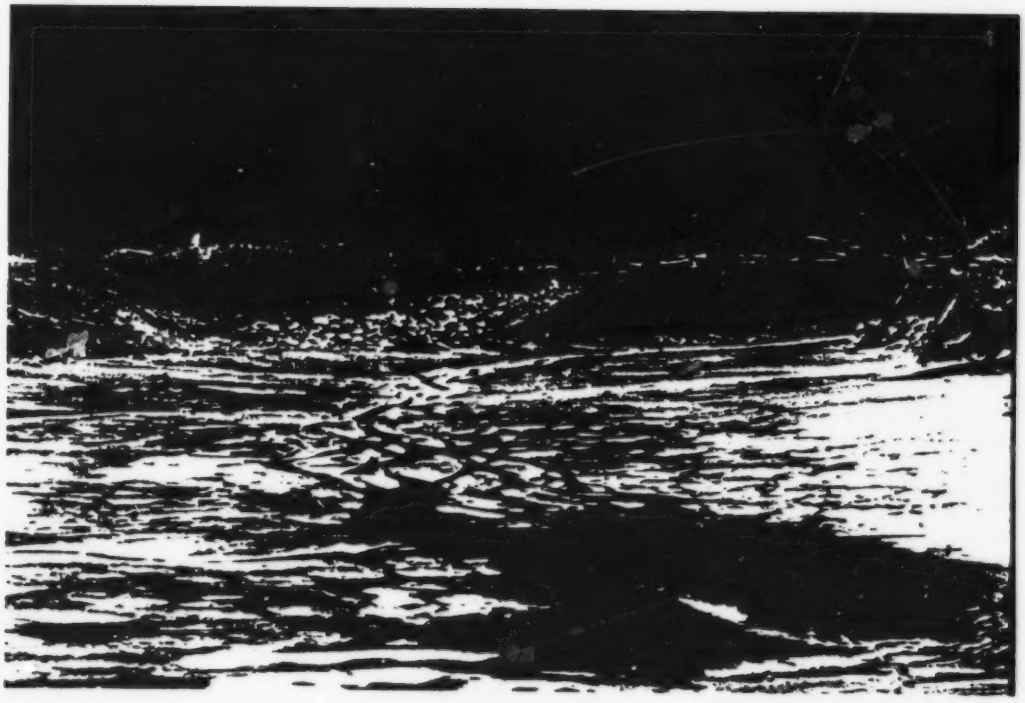

PLATE 14
Looking west at sawmill, lowtide, note possible spillway to left
July, 1990

PLATE 15
Log chute scar on east bank
July, 1990

PLATE 16
Former raised seafloor, east of study area
July, 1990

PLATE 17
Harbour and settlement
ca. 1900

PLATE 18
Commonwealth convention dealing with fisheries conservation at Salmon River, ca. 1922

PLATE 19
Rail system used to transport logs out of Salmon River Settlement, note log rails ca. 1900